Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Previously Presented) A print system comprising:

a computer; comprising a logical printer driver for making print instructions of a prepared

document, preparing a PDL document and print information from the document, and spooling as

a print job, wherein the print information comprises storage data indicating whether the print job

is to be archived in a printer and storage format data indicating in what format the print job

should be archived; wherein:

the printer is connected to the computer, and comprises:

a spool control section for receiving the spooled print job;

a PDL processing section for processing the PDL document in accordance with the print

information of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a

dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

a printer engine for printing the dot image transmitted from the output control section;

wherein the document is printed in a format specified by the computer.

2

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

2. (Previously Presented) The print system as claimed in claim 1 wherein:

the computer further comprises a print instruction section for updating the print

information of the print job and making print instructions, and

the printer further comprises an archive for storing the print job from the spool control

section; and an archive control section for spooling the print job from the print instruction

section.

3. (Original) The print system as claimed in claim 1 further comprising an archive for

storing a pair of PDL document and printer information and a pair of dot image and print

information as the print job.

4. (Currently Amended) A print system comprising:

a computer comprising a logical printer driver for making print instructions of a prepared

document, preparing a PDL document and print information from the document, and spooling as

a print job, wherein the print information comprises storage data indicating whether the print job

is to be archived in a printer and storage format data indicating in what format the print job

should be archived, wherein:

a printer is connected to the computer, and comprises:

a spool control section for receiving the spooled print job;

an archive for storing the print job;

3

U.S. Appln. No.: 09/518,099

an interpreter for interpreting the PDL document in the print job and expanding the PDL document into a dot image;

an output work for storing the dot image; and

an output control section controlling storage of the dot image stored in the output work and the print information in the archive as the print job.

5. (Original) The print system as claimed in claim 4, wherein the computer further includes a print instruction section for updating the print information of the print job and making print instructions, and

wherein the printer further includes:

an archive control section for spooling the print job from the print instruction section; and a dot image processing section for processing to a dot image in accordance with the print information,

wherein the archive stores the print job transmitted from the spool control section.

- 6. (Original) The print system as claimed in claim 4 wherein the archive stores a pair of PDL document and printer information and a pair of dot image and print information as the print job.
 - 7. (Previously Presented) A print system comprising:

U.S. Appln. No.: 09/518,099

a computer; comprising a logical printer driver for making print instructions of a prepared document, preparing a PDL document and print information from the document, and spooling as a print job, wherein the print information comprises storage data indicating whether the print job is to be archived in a printer and storage format data indicating in what format the print job should be archived; wherein:

the printer is connected to the computer, and comprises:

a spool control section for receiving the spooled print job;

a PDL processing section for processing the PDL document of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a dot image;

a dot image processing section for processing the dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

an archive for storing the print job.

8. (Original) The print system as claimed in claim 7 wherein the archive stores a pair of PDL document and printer information and a pair of dot image and print information as the print job.

9. (Withdrawn) A method of controlling a print system, the method comprising:

U.S. Appln. No.: 09/518,099

instructing a logical printer driver of a computer to make print instructions of a prepared document, prepare a PDL document and print information from the document, and spool as a print job;

receiving the spooled print job in a spool control section of a printer;

processing the PDL document in accordance with the print information of the print job in a PDL processing section of said printer;

storing the print job from the spool control section in an archive of the printer;

updating the print information of the print job, and making print instructions, in a print instruction section of said computer;

spooling the print job from the print instruction section in an archive control section of the computer;

adding changes to the print job stored in the archive based on one of standard print information existing in the archive and already registered print information; and

newly registering a plurality of pieces of print information with another name or by overwriting.

10. (Withdrawn) The method as claimed in claim 9, further comprising: reprinting the print job stored in the archive in the format of the print information selected from the computer.

11. (Withdrawn) A method as claimed in claim 9, further comprising:

describing a storage location of the print data in print information without the printed data contained in the print job spooled when the print job stored in the archive is reprinted; and

accessing the storage location of the print data described in the print information by the dot image processing section or the PDL processing section receiving the print job.

12. (Withdrawn) A print system comprising:

a computer; and

a printer connected directly to the computer or indirectly to the computer via a network,

wherein the computer comprises a logical printer driver for making print instructions of a document prepared, preparing a PDL document and print information from the document, and spooling as a print job, and

wherein the printer comprises:

a spool control section for receiving the print job spooled;

a PDL processing section for processing the PDL document in accordance with the print information of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

a printer engine for printing the dot image transmitted from the output control section;

wherein the document is printed in a format specified by the computer;

U.S. Appln. No.: 09/518,099

wherein the computer further includes a print instruction section for updating the print information of the print job and making print instructions; and

wherein the printer further includes:

an archive for storing the print job from the spool control section; and an archive control section for spooling the print job from the print instruction section.

13. (Previously Presented) A print system comprising:

a computer; and

a printer connected directly to the computer or indirectly to the computer via a network, wherein the computer comprises a logical printer driver for making print instructions of a document prepared, preparing a PDL document and print information from the document, and spooling as a print job, and

wherein the printer comprises:

a spool control section for receiving the print job spooled;

a PDL processing section for processing the PDL document in accordance with the print information of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

a printer engine for printing the dot image transmitted from the output control section;

U.S. Appln. No.: 09/518,099

wherein the document is printed in a format specified by the computer;

said print system further including an archive for storing a pair of PDL document and printer information and a pair of dot image and print information as the print job.

14. (Withdrawn) The print system as claimed in claim 12, wherein said print instruction section is also for

changing a print job stored in the archive based on one of standard print information existing in the archive and already registered print information; and

newly registering a plurality of pieces of print information with another name or by overwriting.

15. (Withdrawn) The print system as claimed in claim 14, wherein said print system is also capable of:

reprinting the print job stored in the archive in the format of the print information selected from the computer.

16. (Withdrawn) The print system as claimed in claim 14, wherein said print system is also capable of:

describing a storage location of the print data in print information without the printed data contained in the print job spooled when the print job stored in the archive is reprinted; and

U.S. Appln. No.: 09/518,099

accessing the storage location of the print data described in the print information by the dot image processing section or the PDL processing section receiving the print job.

17. (Previously Presented) A print system comprising:

a computer; and

a printer connected directly to the computer or indirectly to the computer via a network,

wherein the computer comprises a logical printer driver for making print instructions of a prepared document, preparing a PDL document and print information from the document, and spooling as a print job,

wherein the printer comprises:

a spool control section for receiving the print job spooled;

a PDL processing section for processing the PDL document of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a dot image;

a dot image processing section for processing the dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

an archive for storing the print job,

wherein the archive stores a pair of PDL document and printer information and a pair of dot image and print information as the print job.

U.S. Appln. No.: 09/518,099

18. (Previously Presented) A print system comprising:

a computer; and

a printer connected directly to the computer or indirectly to the computer via a network,

wherein the computer comprises a logical printer driver for making print instructions of a prepared document, preparing a PDL document and print information from the document, and spooling as a print job,

wherein the printer comprises:

a spool control section for receiving the print job spooled;

a PDL processing section for processing the PDL document of the print job;

an interpreter for interpreting the PDL document and expanding the PDL document into a dot image;

a dot image processing section for processing the dot image;

an output work for storing the dot image;

an output control section for controlling the output work; and

an archive for storing the print job,

wherein the output control section also controls the storing of the dot image stored in the output work and the print information in the print archive as the print job.

19. (Previously Presented) The print system as claimed in claim 1, wherein the print information further comprises at least one of:

number of copies data indicating the number of copies desired;

U.S. Appln. No.: 09/518,099

paper size data indicating the size of paper to be printed upon;

paper feed section data indicating which paper source the printer will use;

paper discharge section data indicating where output will be discharged from the printer;

output format data indicating folding patterns;

double sided print data indicating whether double sided printing is activated;

binding position data indicating the position of bindings; and

stapling data indicating the number and position of staples.

20. (Previously Presented) The print system as claimed in claim 4, wherein the print information further comprises at least one of:

number of copies data indicating the number of copies desired;

paper size data indicating the size of paper to be printed upon;

paper feed section data indicating which paper source the printer will use;

paper discharge section data indicating where output will be discharged from the printer;

output format data indicating folding patterns;

double sided print data indicating whether double sided printing is activated;

binding position data indicating the position of bindings; and

stapling data indicating the number and position of staples.

21. (Previously Presented) The print system as claimed in claim 7, wherein the print information further comprises at least one of:

Amendment Under 37 C.F.R. § 1.111 U.S. Appln. No.: 09/518,099

number of copies data indicating the number of copies desired;

paper size data indicating the size of paper to be printed upon;

paper feed section data indicating which paper source the printer will use;

paper discharge section data indicating where output will be discharged from the printer;

output format data indicating folding patterns;

double sided print data indicating whether double sided printing is activated;

binding position data indicating the position of bindings; and

stapling data indicating the number and position of staples.

22. (Previously Presented) The print system as claimed in claim 1, wherein the printer further comprises an archive for storing the print job based on a value of the storage data; and

the print information of the print job stored in the archive can be updated by the computer; and

the stored print job can be printed according to the updated print information.

23. (Previously Presented) The print system as claimed in claim 4, wherein the print information of the stored print job in the archive can be updated by the computer; and

the stored print job can be printed according to the updated print information.

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

24. (Previously Presented) The print system as claimed in claim 7, wherein the archive stores the print job based on a value of the storage data; and the print information of the print job stored in the archive can be updated by the computer; and

the stored print job can be printed according to the updated print information.

25. (Previously Presented) The print system as claimed in claim 4, further comprising:
a PDL processing section for processing the PDL document in accordance with the print information of the print job; wherein

the archive also stores a PDL document for later retrieval.

26. (Previously Presented) The print system as claimed in claim 7, wherein:
the output control section controls the storing of the dot image stored in the output work
and the print information in the archive as the print job.

27. (Previously Presented) The print system as claimed in claim 1 further comprising an archive for storing a pair of PDL document and printer information or a pair of dot image and print information as the print job.

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

28. (Previously Presented) The print system as claimed in claim 4 further comprising an archive for storing a pair of PDL document and printer information or a pair of dot image and

print information as the print job.

29. (Previously Presented) The print system as claimed in claim 7 further comprising an

archive for storing a pair of PDL document and printer information or a pair of dot image and

print information as the print job.

30. (Previously Presented) The print system as claimed in claim 1, wherein the storage

data and storage format data are chosen by a user through an interface in the computer.

31. (Previously Presented) The print system as claimed in claim 7, wherein the storage

data and storage format data are chosen by a user through an interface in the computer.

32. (Withdrawn) A method of printing, comprising:

generating a print job in an electronic device, wherein the print job comprises original

print information and print data;

transferring the print job to a printing device;

storing the print job in a storage medium in the printing device for later access;

generating new print information for the print job in the electronic device;

15

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

transferring the new print information to the storage medium and overwriting the original print information with the new print information;

printing the stored print job according to the new print information.

33. (Previously Presented) The print system as claimed in claim 1, wherein the print information associated with the PDL document is replaceable.

34. (Previously Presented) The print system as claimed in claim 1, wherein the storage format data indicates whether the print job should be stored in a PDL format or a dot image format.

35. (Previously Presented) The print system as claimed in claim 4, wherein the print information associated with the PDL document is replaceable.

36. (Previously Presented) The print system as claimed in claim 4, wherein the storage format data indicates whether the print job should be stored in a PDL format or a dot image format.

37. (Previously Presented) The print system as claimed in claim 4, wherein the print information comprises storage data indicating whether the print job is to be archived in the printer and storage format data indicating in what format the print job should be archived.

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 09/518,099

38. (Previously Presented) The print system as claimed in claim 7, wherein the print information associated with the PDL document is replaceable.

39. (Previously Presented) The print system as claimed in claim 7, wherein the storage format data indicates whether the print job should be stored in a PDL format or a dot image format.

40. (Previously Presented) The print system as claimed in claim 7, wherein the dot image processing section and the PDL processing section are arranged in parallel between the spool control section and the output work.